

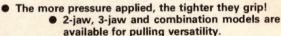
## INDEX

Description	rage IVO.	Description		
Adapters, Step Plate	8	Electronic Ignition Analyzer.		
Adapters, Threaded (Puller) .	8	Engine Service Tools		
Air Conditioning Electrical		Engine Stands		
System Analyzer		Extractors, Bushing		30
Alignment Tools		Filter Wrench		34
Allen Wrenches		Flange Type Puller		. 9
Attachments, Bearing Pulling		Flare Nut Wrenches		28
Attachments, Internal Pulling		Floor Cranes	38,	39
Automatic Transmission Clut		Forcing Presses		
Spring Compressor		Front-end Tools		
Axle Nut Wrenches		Front Coil Spring		
Axle Stud Cone Plier		Compressor	12,	13
Ball Joint Spanner Wrench	15	Front Suspension Wrench		14
Ball Joint Suspension Tools .	12, 13	Gear and Pulley Pullers		
Battery Terminal Puller		"Grip-O-Matic" Pullers		
Bearing and Bushing Driver S		Head Bolt Bit		
Bearing Pullers 2-7, 10,	18, 23, 37	Head Mounting Fixture		
Bearing Service Set		Hollow Punches		
Bench Holding Fixture		Hook Spanner Wrenches		
Bolt Bits		Horseshoe Lock Ring Plier		
Brake Anchor Pin Press		Hub Puller		
Brake Service Tools		Hydraulic Cranes		
Bushing Driver Sets	30	Hydraulic Shop Presses		
Camshaft Bearing Tool	17	Hydraulic Valve Lifter Puller		
Camshaft Service Tool	17			
Carburetor Limiter Cap		Internal Pulling Attachments		
Remover	19	Jacks, Transmission		
Caster-Camber Wrenches		Jimmy Bars	******	29
Chain Wrenches		Level Lift Floor Crane		
Charging System Analyzer		Lifting Equipment		39
Choke Checker		Lip Seal Protectors,		
Clutch Aligning Sets		Automatic Transmission		
Clutch and Transmission Tool		Load-positioning Slings		
Crane Accessories		Lock-nut Wrenches		
Cranes, Mobile	38, 39	Lube Kit, Upper Arm Bushing		11
Crankshaft Damper Puller		MacPherson Strut Spring		
Replacer		Compressor		13
Cup Pulling Attachments		Magnetic Pick-up Tools		29
Dent Puller		Metric Clutch Aligning Set		24
Dial Indicator		Metric Hex Key Wrenches		
Differential Bearing Tools		Metric Serrated Bolt Bits		19
Differential Housing Spreader		Oil Seal and Transmission		
Disc Brake Tools		Bushing Puller Sets		24
Distributor Lock-nut Wrenches		Oil Seal Pick		29
Drum and Rotor Stud Fixture		Pilot Bearing Pullers	7	10
Drive Line Tools		Pitman Arm Tools		
Dual Wheel Dolly	41	Plier, Axle Stud Cone		
Electronic Diagnostic		Plier, Truck Brake Spring		
Equipment	20, 21	Plier, Horseshoe Lock Ring		
©Copyright 1978			,	
by Owatonna Tool Company				
a, and and room outsparty				

		D	
Description Pliers, Retaining Ring	Page No.	<b>Description</b> Spanner Wrenches	Page No.
Pliers, Retaining King	26		
Pliers, Snap Ring		Spark Plug Boot Puller	
Piston Pin Remover/Installer		Spicer Tools	
Set		Spring Compressors	
Power Steering Pump Pulley		Starting/Charging System	
Puller		Analyzer	
Presses, Hydraulic Forcing.		Steering Wheel Puller	
Pry Bars		Step Plate Adapters	
Puller Adapters		Thread Chaser	
Puller Attachments		Threaded Adapters (Puller)	
Puller, Battery Terminal		Tie Rod Tools	
Puller, Camshaft Bearing		Timing Gear Pullers	
Puller, Dent		Torque Wrenches	
Puller, Disc Brake Piston		Transmission Bearing Service	
Puller, Flange Type		Transmission Bushing and C	
		Seal Puller Sets	
Puller, Spark Plug Boot		Transmission Tools	
Puller, Steering Wheel	1 10 22 27	Transmission Jacks	
Pullers, Bearing 2-7, 10		Truck Brake Anchor Pin Pres	
Pullers, Bearing Cup Pullers, Differential Bearing		Truck Brake Spring Plier	
Pullers, Gear and Pulley		Truck Wheel Bearing Lock-n	
Pullers, Internal		Wrenches	
		<b>Tubular Spanner Wrenches</b>	
Pullers, Pilot Bearing Pullers, Pitman Arm		Universal Joint Press	12, 23
Pullers, Pulley		Upper Arm Bushing Lube Ki	t 11
Pullers, "Push-puller"		Upper Control Arm Bushing	
Pullers, Rear Axle		Service Set	12
Pullers, Rear Axle Bearing .		Vacuum Pump	18
Pullers, Slide Hammer		Valve Seat Removing Tool.	
Pulley Pullers		Wheel Bearing Lock-nut Wre	
Punch (Hollow) Sets		Wheel Dolly	
'Push-puller" Pullers		Wrench, Front Suspension.	
'Push-puller' Ratchet		Wrench, Ball Joint Spanner	
		Wrench, Filter	
Ratchet, "Push-puller"		Wrench, Spicer Clutch	
Rear Axle Bearing Puller		Adjusting	33
Rear Suspension Tools		Wrenches, Spanner	
Rear Axle Puller		Wrenches, Allen	
Retaining Ring Pliers		Wrenches, Chain	
Repair Stands, Universal		Wrenches, Distributor Lock-	
Sealant Dispenser		Wrenches, Flare Nut	
Set Screw Wrenches		Wrenches, Metric	
Shaft Protectors		Wrenches, Ratchet	
Shock Absorber Service Too		Wrenches, Set Screw	
Shock Link Separator		Wrenches, Torque	
Shop Presses and Accessori		Wrenches, Wheel Bearing	1 1 1 1 1 1
Slide Hammer Pullers		Lock-nut	31
Slings, Load-positioning	38		
Snan Ring Tools			



## Grip-O-Matic



Thin jaws and easy adjustment make OTC pul-

lers handy to use!

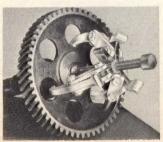




COMBINATION 2-JAW/3-JAW REVERSIBLE

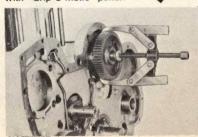
#### THE HARDER THE PULL, THE TIGHTER THE GRIP!

Universal, forcing screw-powered OTC "Grip-O-Matic" pullers solve hundreds of tough pulling jobs! Press-fitted parts are removed easily and without damage to costly parts. Savings in time and labor will quickly repay your investment in OTC pullers. Positive gripping, thin jaws and easy adjustment make OTC pullers essential for every shop! Available in 2-jaw, 3-jaw and combination 2-3-jaw models.



3-jaw puller grips gear near hub for damage-free removal.

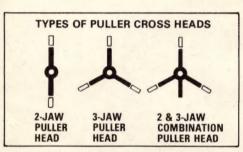
Gear being removed from a shaft with "Grip-O-Matic" puller.

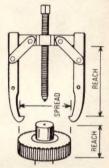




#### HOW TO SELECT THE PULLER YOU NEED

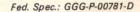
As shown below, compare "reach" and "spread" of pulling job with that of the pullers listed. The puller selected must have dimensions equal to or larger than those of the job. If certain clearance problems exist, a 3-jaw puller may be needed. A puller of adequate dimensions will usually have enough power. However, if in doubt, select the next larger size!





Fed. Spec.: GGG-P-00781-D

PULLER NO.	PULLER TYPE	"A" REACH	"B" SPREAD	CAP.	SCREW SIZE
1000	2-Jaw	21/8"	31/4"	1-ton	5/16" - 24 × 31/8" lg.
1010	3-Jaw	21/8"	31/4"	1-ton	5/16" - 24 × 31/8" lg.
1000½-L	2-Jaw	33/8"	4"	2-ton	$\frac{3}{8}$ " × $4\frac{7}{8}$ " lg.
1010½-LA	2-3-Jaw	33/8"	43/4"	2-ton	$\frac{3}{8}'' \times 4\frac{7}{8}'' \text{ lg.}$
1001	2-Jaw	31/4"	6"	5-ton	%6" × 615/6" lg.
1011-A	2-3-Jaw	31/4"	7"	5-ton	%6" × 615/6" lg.
1001-L	2-Jaw	51/2"	6"	5-ton	%6" × 615/6" lg.
1011A-L	2-3-Jaw	51/2"	7"	5-ton	%6" × 615/6" lg.
1002	2-Jaw	5"	9"	7-ton	11/16" × 9" lg.
1012-A	2-3-Jaw	5"	101/2"	7-ton	11/16" × 9" lg.
1002-L	2-Jaw	83/4"	91/2"	7-ton	11/16" × 9" lg.
1012A-L	2-3-Jaw	83/4"	11"	7-ton	11/16" × 9" lg.
1003	2-Jaw	11"	121/2"	13-ton	13/16" × 12" lg.
1013-A	2-3-Jaw	11"	14"	13-ton	13/16" × 12" lg.
1003-L	2-Jaw	151/4"	151/2"	13-ton	13/16" × 12" lg.
1013A-L	2-3-Jaw	151/4"	17"	13-ton	13/16" × 12" lg.





## **PUSH-PULLERS®**

Apply pushing or pulling force to remove and install parts easily!

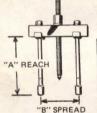
Use with OTC attachments for pulling ver-

satility!

The extremely versatile 
"Push-puller" can be used 
to apply either pushing or 
pulling force, depending 
on how it is set up. Legs 
of various lengths are 
available for each puller. 
A wide variety of threaded adapters and attachments are available, too.



Transmission output shaft removal.



Puller No.		"B"	Cap.	Std. Legs	Screw Size
927	83/8"	21/8"-71/4"	10-ton	927-A	3/4"-16×12" lg.
938	115/8"	31/8"-113/4"	17½-ton	930-D	1"-14×131/4" lg.

## ADDITIONAL LEG LENGTHS AVAILABLE

Legs for N	o. 927
"A" Reach	Leg End Thread
43/4"	5/8"-18
63/4"	5/8"-18
113/4"	5/8"-18
153/4"	5/8"-18
	"A" Reach 43/4" 63/4" 113/4"

Extra	Legs for N	o. 938
Part No. (Pr.)	"A" Reach	Leg End Thread
930-E	41/2"	5/8"-18
930-D	91/2"	5/8"-18
930-B	161/2"	5/8"-18
930-C	221/2"	5/8"-18
930-F	30"	5/8"-18

Use with pulling attachments and adapters found on the following page and page 8!

Fed. Spec.: GGG-P-00781-D



#### **PULLING ATTACHMENTS**

- "Knife-like" edges fit behind those hard-to-grip parts for pulling!
- Ideal accessories for shop presses!

Solve pulling problems where space does not permit hooking puller jaws directly onto part to be pulled. May be used with OTC "Grip-O-Matic" puller or "Push-puller". Nos. 679 and 680 are for pulley removal.



TOOL NO.	MAX. SPREAD	MIN. SPREAD	"A"	"B"	USE WITH OTC PULLER NO.
9491/2	7/8"	1/4"	5/16"-NC	111/16"	1000, 1000½-L, 1010½-LA
950	2"	1/8"	3/8"-16	25/8"	1001, 1001-L, 1011-A, 1011A-L, 515, 515-A
951	45/8"	3/8"	5/8"-18	41/4"	1002, 1002-L, 1012-A, 1012A-L, 1013A-HLY, 927, 522
952	51/4"	1/2"	5/8"-18	6"	1003, 1003-L, 1003½-HLY, 1013-A, 1013A-L, 938, 938-HYD
952-A	85/8"	1/2"	5/8"-18	6"	1003, 1003-L, 1003½-HLY, 1013-A, 1013A-L, 938, 938-HYD
952-D	8"	5/8"	1"-14	71/8"	Use with 30-ton shop press
679	5 1/8"	13/4"	5/8"-18	6"	1002, 1002-L, 1012-A, 1012A-L, 1013A-HLY, 927
680	10"	15/8"	5/a"-18	101/16"	1003, 1003-L, 1003½-HLY, 1013-A, 1013A-L, 938, 938-HYD

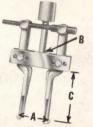
#### INTERNAL PULLING ATTACHMENTS

660

Fed. Spec.: GGG-P-00781-D

 Remove bearing cups, oil seals and bushings from blind holes!

Those difficult "inside" pulling jobs which involve removal of a part from a blind hole become easy with an OTC Internal Pulling Attachment. Jaws are adjustable.



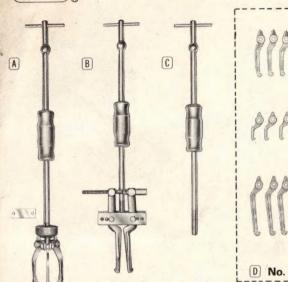
TOOL NO.	JAW SPREAD	"A"	"B"	"C"	USE WITH
943-C	11/2" to 5"	1"-14 thd.	5/8"-18 thd.	21/8"	927 and 938
943	11/2" to 6"	1"-14 thd.	5/8"-18 thd.	4"	"PUSH-PULLERS"
943-B	11/2" to 6"		5/8"-18 thd.	4"	943-R or 943-S Pullers
943-A	11/2" to 7"	1"-14 thd.	5/8"-18 thd.	51/2"	515-S Screw
943E	11/2" to 6"	1"-8 thd.	5/8"-18 thd.	4"	938-HYD/PUSH- PULLER"

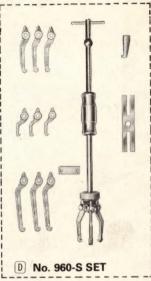
Fed. Spec.: GGG-P-00781-D



## **SLIDE HAMMER PULLERS**

• Pull small gears, bearings, oil seals, etc.





## A REVERSIBLE JAW SLIDE HAMMER PULLERS

No. 960 — Slide hammer puller with 2½ lb. hammer, 27" in length.

No. 960-B — Slide hammer puller with 5 lb. hammer, 27" in length.

	2-JAW SPREAD						
Puller	ller Inside		Out	side			
Nos.	Min.	Max.	Min.	Max.			
960	11/4"	31/2"	1"	41/2"			
and	3	-JAW	SPREA	D			
960-B	11/2"	41/4"	11/2"	41/2"			

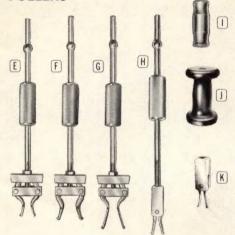
## B SLIDE HAMMER PULLERS FOR BLIND HOLE PULLING

Ideal for removing bearing cups, outer races and oil seals from blind holes. Spread 15% "to 6", max. reach 4", and overall length is 28".

No. 943-T — Slide hammer puller consisting of: 943-B internal pulling attachment, 943-S basic 2½ lb. slide hammer unit.

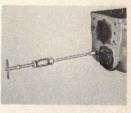
No. 943-U — Slide hammer puller consisting of: 943-B internal pulling attachment, 943-R basic 5 lb. slide hammer unit.

#### PILOT BEARING PULLERS





Slide hammer and cup pulling attachment.



Threaded adapter, page 8, used with slide hammer.

#### © BASIC SLIDE HAMMERS

May be used with internal pulling attachment and threaded adapters. No. 943-S — Basic slide hammer with  $2\frac{1}{2}$  lb. hammer,  $24^{\prime\prime}$  lg.,  $\frac{5}{8}^{\prime\prime}$ -18 thd.

No. 943-R — Basic slide hammer with 5 lb. hammer. 24" lg., \( \frac{5}{8}"-18 \) thd.

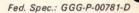
© No. 960-S—SLIDE HAMMER SET Set contains OTC's popular No. 960 reversible-jaw slide hammer puller plus assortment of special jaws and adapters. For 2-jaw usage, inside spread of ¾" to 5½" and outside spread of ¾" to 7½". For 3-jaw application, inside spread of 1" to 6¼", outside spread 1" to 6¼", outside spread 1" to 6¼".

#### PILOT BEARING PULLERS

- No. 954 Jaw spread of ½" to 1½", ¾" reach.
- F No. 954-B Jaw spread of ¾" to 2½", 1" reach.
- No. 954-C Jaw spread of ½"
   to 2", 1¾" reach.
- Mo. 957 Jaw spread of ½" to 13/8", 1"-20 thd. head end.
- No. 959 Internal pulling attachment only from No. 957.

#### SLIDING HAMMERS ONLY

- No. 943-S3 2½ lb. sliding hammer.
- No. 943-S4 5 lb. sliding hammer.





### **PULLER ADAPTERS**

For added puller versatility.

#### MALE-FEMALE THREADED ADAPTERS

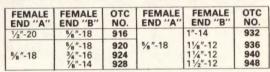
Used on ends of "Push-puller" legs or forcing screws.



Female End	Male End	Lgth.	OTC No.	Female End	Male End	Lgth.	OTC No.
5/8″-18	1/4"-20 5/6"-18 7/6"-14 7/6"-20 3/8"-24 3/6"-16 1/2"-20 1/2"-13 9/6"-18	21/4"	9-M 11-M 12-M 13-M 14-M 15-M 16-M 17-M 18-M	5/e"-18	%"-12 %"-11 34"-16 34"-10 76"-14 76"-9 1"-14 1/4" pipe	21/4"	19-M 20-M 24-M 25-M 28-M 29-M 32-M 37-M 39-M

#### FEMALE THREADED ADAPTERS

Used on the ends of OTC "Push-puller" forcing screws or legs in the removal/installation of shafts, axles, etc.





#### STEP PLATE ADAPTERS

DIA.	DIA.	OTC NO.	DIA.	DIA.	OTC NO.
1"	3/4"	630-1	23/8"	17/8"	630-10
11/6"	3/8"	630-2	21/2"	2"	630-11
11/4"	1"	630-3	25/8"	21/8"	630-12
13/8"	11/8"	630-4	23/4"	21/4"	630-13
15/8"	11/4"	630-5	27/8"	23/8"	630-14
13/4"	13/8"	630-6	3"	21/2"	630-15
17/8"	11/2"	630-7	31/4"	23/4"	630-16
2"	15/8"	630-8	31/2"	3"	630-17
21/9"	13/4"	630-9			







#### SHAFT PROTECTORS

"A"	"B"	"C" (60°)	"D" (60°)	OTC No.	"A"	"B"	"C" (60°)	"D" (60°)	010
11/2"	3/4"	3/8"	7/16"	625-1	3/4"	3/4" 5/8"	1/4"	1/4"	625-4
11/4"	3/4"	3/8"	3/8" 5/16"	625-2 625-3	5/8"	5/8"	3/16"	3/16"	625-5 625-6



## SPECIAL AUTOMOTIVE PULLERS

No. 522 — LARGE GEAR AND PULLEY PULLER... Removes parts having tapped holes, such as gears, pulleys, etc. Cap screws not included, but cap screws up to ½" dia. may

be used. Covers bolt circle of 2" to 73/4" when 1/2" dia. cap screws are used. Block: 81/4" long,

forcing screw: 115/8" lg.

**GEAR AND PULLEY PULLERS** . . . Ideal for pulling timing gears and other parts having tapped holes. Includes two hex head cap screws,  $\frac{3}{6}$ "-16NC  $\times$  3" Ig. Bolt circle:  $1\frac{1}{2}$ " to  $4\frac{1}{4}$ ". Block:  $4\frac{1}{6}$ " long.

No. 515 — Puller with 13" lg. screw.

No. 515-A — Puller with  $5\frac{1}{2}$ " lg. screw.

No. 518 — FLANGE TYPE PULLER . . . Works equally well on parts having either two or three tapped holes. Handles bolt-circle diameters from  $1\frac{1}{2}$ " to  $4\frac{8}{8}$ ". Includes three cap screws  $\frac{3}{8}$ "-24NF  $\times$  3" Ig., three cap screws  $\frac{3}{8}$ "-16NC  $\times$  3" Ig.

No. 915-A — STEERING WHEEL PULLER . . .

Pulls steering wheels on most makes of late model cars. Supplied with three sets of cap screws, 2 per set:  $\frac{3}{6}$ "-16NC;  $\frac{5}{16}$ "-18NC;  $\frac{5}{16}$ "-24NF.

No. 898 — DENT PULLER . . . Pulls dents from fenders, side panels, door panels and tops without time-consuming removal of inside panels and upholstery.

No. 7031 — STEERING WHEEL LOCK PLATE REMOVER...

Simplifies removal and installation of the round,

wire snap-ring that retains steering wheel lock plate.

7031





915-A



## SPECIAL AUTOMOTIVE PULLERS

No. 827-B - UNIVERSAL HUB PULLER . . . Has readily adjustable sliding arms to pull wheel hubs quickly and easily, Maximum reach, 71/2" bolt circle. Striking wrench and puller screw included. Provides straight

No. 847-A - BATTERY TERMINAL PULLER . . . Easily removes battery terminals from posts without damage

to battery cover. Special striking pad on puller.

#### DIFFERENTIAL BEARING PULLERS . . .

For removing differential side carrier bearings of a wide variety of cars and light trucks. Use with step plate adapters found on page 8.

No. 1001-C — Puller with 31/2" max. reach. 11/4" to 41/2" spread. Primarily for servicing

Ford products.

No. 1001-D - Puller with 31/4" max. reach, 6" max, spread. For servicing most GM,

AMC, Chrysler products.

PILOT BEARING PULLERS . . . Designed to pull flywheel pilot bearings in close quarters where slide hammer cannot be

No. MD-955 — Reach: 1", cap. 1/2" to 11/2"

LD. No. MD-956 - Reach: 1", cap. 7/8" to 2" I.D. No. A-202-A -- PULLEY AND DRIVE END BEARING PULLER . . . To remove power steering pump pulleys and alternator

drive end bearing from Chrysler and Ford

No. 7060 — POWER STEERING PUMP PULLEY REMOVER/INSTALLER . . . Ideal for pulley removal or installation on Saginaw power steering pumps on '75 thru current GM engines and 460 cu. in. Ford engines.

10



PITMAN ARM PULLERS . . . Designed to handle the toughest pitman arm pulling jobs. Adjustable, have special forged jaws shaped to fit the job. Pullers have two clamp bolts that lock jaws on the pitman arm.

No. HC-642 — For med., heavy trucks.
No. HC-643 — For pass. cars, light trucks.

No. 844 — PITMAN ARM WEDGE. Quickly removes pitman arms of cars and light trucks. 11" long.

No. 462 — SHOCK LINK AND TIE ROD SEPARATOR . . . Separates shock absorber links and tie rods. 16" long.

No. 7007 — UNIVERSAL TIE ROD END REMOVER . . . Tool is inserted between spindle arm connecting the tie rod and drag link or steering arm. Universal application for most cars.

No. 542 — SHOCK ABSORBER SER-VICE SET . . . Permits fast and easy shock absorber removal and installation. Set consists of a socket and holding handle. Socket is turned with an 11/16" ratcheting box wrench (not included) to remove or install shock absorber retaining nut. 1/16" 12 pt. opening on socket.

No. 7001 — UPPER ARM BUSH-ING LUBE KIT . . . Kit contains necessary 90° fitting to permit using grease gun for lubricating upper arm cross-shaft bushing on '65 thru '71 light Ford cars and Thunderbird; '65 thru current Comet and Maverick; and Mustang thru '73.









No. 7025 — BALL JOINT SERVICE SET . . . For removal and replacement of ball joints on most car makes and models. Easily removes and installs all press-fit ball joints. Press can also be used to remove/replace universal joints with needle-type bearings.



No. 7068 — UPPER CONTROL ARM BUSH-ING SERVICE SET . . . For fast, easy removal and installation of press-in type upper control arm bushings on late model Ford, GM and Chrysler vehicles. In most cases you can do the job without removing the control arm from the vehicle and mechanical screw power does it without damaging any costly components.



No. 7045 — FRONT COIL SPRING COM-PRESSOR . . . Designed for replacing front coil springs when the spring is between the upper and lower control arms. Four selfaligning plates — supplied for use on all 1955 thru current Ford, GM and Chrysler vehicles — assure complete load distribution of tool components under tension. When removed, the safety plate secures the compressed spring to the bench for controlled release of spring tension.



#### No. 7065 — VW BALL JOINT SERVICE SET

... Removes and installs press-in type ball joints on 1966 and newer VW Beetles and Karmann Ghias. Eliminates time consuming makeshift methods that can also be hazardous. Permits ball joint replacement without disassembling torsion arms from the vehicle. Handles even rusted and corroded ball joints with simple mechanical screw power.

No. 7066 — VW TRACK ARM BUSHING SERVICE SET . . . For use with the No. 7025-A "C" Frame assembly (page 12) when replacing inner track arm bushings on 1971 thru current VW Super Beetles with Type I suspensions and vehicles equipped with Type IV suspensions. Forcing screw power replaces methods that might damage expensive components.

No. 7067 — MacPHERSON STRUT SPRING COMPRESSOR . . . Simplifies the job of compressing the coil spring and removing the shock from vehicles equipped with MacPherson strut suspensions. With just one forcing screw and two platens, the compressing unit applies uniform pressure on the spring. The single forcing screw design eliminates alternating from one screw to another to apply uniform pressure on the spring.



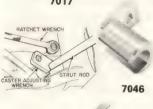
7067













No. 7044 — PINTO, MUSTANG II and BOBCAT CASTER-CAMBER ADJUSTER SET... A must tool to properly adjust caster and camber on '74 thru current Pinto, Mustang II and Bobcat front suspension. Six-piece set insures fast and accurate setting of caster and camber. Limits movement of front suspension after loosening cross shaft bolts.

No. 7017 — PINTO CASTER-CAMBER ADJUSTER . . . Makes front-end alignment on '71 thru '73 Ford Pintos fast and easy. Limits movement of the front suspension.

No. 7046 — CADILLAC-CHEVROLET CASTER ADJUSTING TOOL . . . Designed especially for '61 thru current Cadillacs and '65 thru '70 Chevrolets. Slips over strut rod, permits caster adjustment when retaining nut is deep inside the frame member. To be used with a ½" drive ratchet or flex wrench.

No. 7051 — FRONT END SUSPENSION WRENCH... Allows you to perform fast, trouble-free service on front end alignment work. Wrench provides ample leverage to loosen rusted and corroded parts. Designed to adjust the camber on late model Cadillacs with ball joint suspensions.

No. 7029 — CASTER-CAMBER WRENCH . . . Provides adjustment on '65 thru current Ford, Mercury, Thunderbird and Mark III cars, also Chrysler mid-year intermediates and all '74 thru current Chryslers, including Imperial.



## FRONT SUSPENSION TOOLS AND BRAKE TOOLS

No. 7010 — CASTER-CAMBER AD-JUSTER . . . Perfect for getting around A/C unit and other obstructing components under the hood of '65 thru current Ford, Mercury, Thunderbird and Mark III cars and all '74 thru current full size Chryslers, including Imperials.

No. 7023 — TIE ROD ADJUSTING TOOL . . . Permits 360° sleeve rotation for required adjustment. Four-position feature lets you locate tool to grip sleeve properly. For most compact and standard size cars and light trucks.

No. 7003 — FRONT WHEEL BEARING LOCKNUT WRENCH... Fits spanner holes in adjusting and lock-nuts used on front wheel bearings of 4-wheel drive Chevrolet and GMC ½-ton ('60-current), Blazer and Bronco ('66-current), Ford F-100-250 ('59-current) and Dodge ½-ton vehicles ('69-current).

No. 7008 — FRONT WHEEL BEARING LOCKNUT WRENCH . . . For adjusting and locking adjuster nuts on Ford 9,000 lb. and 11,000 lb. front axles. Adapts to either one of two sizes involved by relocating two allen screws.

No. 7080 — SPANNER WRENCH . . . Designed for removal and installation of ball joint adjusting sleeves on ½, ¾ and 1-ton Dana open yoke front axles used on Ford, GM, Chrysler, IHC and Jeep 4-wheel drive vehicles. The No. 7080 permits easy torquing with 1" socket for proper upper ball joint preload.



### **BRAKE TOOLS**

No. 714 — HORSESHOE LOCK RING PLIER . . . This ruggedly-built OTC plier is designed to spread and remove horseshoe lock rings used on hydraulic brakes, differentials and transmissions. 8" long; maximum spread of 1%".



Fed. Spec.: GGG-P-480



## **BRAKE TOOLS**



No. 7030 — DISC BRAKE DUST BOOT INSTALLER SET . . . Consists of five installing rings and a handy oil seal pick to easily and quickly install dust boots on Ford and Chrysler single-piston calipers.

No. 7033 — DISC BRAKE DUST BOOT IN-STALLER ... Properly installs dust boot of single-piston caliper brakes on '68 thru current Chevrolets and Pontiacs; '69 thru current Oldsmobiles. Buicks and Cadillacs.

No. 7034 — DISC BRAKE PAD SPREADER . . . For disc brake pad installation, fits between the two new pads being installed, is then expanded to retract the piston. With the pads now held firmly in place, both hands are free to start the caliper over the rotor. For all standard and four-piston caliper disc brakes.

No. 7022 — DISC BRAKE PISTON PULLER . . . Removes disc brake pistons with hollow centers from both single and four piston calipers. Handles pistons 1" to 2\(^3\kappa^\)" in diameter regardless of condition. Simply insert tool until jaws bottom in piston. Tighten expander to imbed jaw points in piston. Attach a universal slide hammer with \(^1\kappa^\)"-20 or \(^5\kappa^\)"-18 threaded end. A few sharp blows of the slide hammer does the job. Straight pull prevents piston from cocking

No. 7040-K — DISC BRAKE SERVICE SET . . . This kit contains a select group of disc brake service tools necessary for servicing today's new-style disc brakes — OTC's Disc Brake Piston Puller, Dust Boot Installer for GM cars, Dust Boot Installer for Ford and Chrysler cars, "O"-Ring Seal Pick and Disc Brake Pad Spreader. Handy plastic carrying and storage case included.

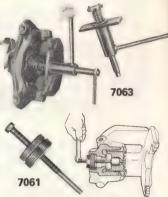
in caliper.



## BRAKE TOOLS AND ENGINE SERVICE TOOLS

No. 7063 — REAR DISC BRAKE PISTON ADJUSTER... Designed for installing new brake pads on the rear disc brake caliper of '75 thru current Ford and Mercury automobiles. Also permits piston adjustment for lining-to-rotor clearance.

No. 7061 — REAR DISC BRAKE CALIPER PISTON REMOVER... Removes the caliper piston on rear disc brakes on Ford automobiles. The 7061 virtually eliminates damaging the parking brake adjuster mechanism during overhaul. For use on '75 thru current Mercury, T-Bird, Lincoln, Mark IV. Granada and Monarch.



### **ENGINE SERVICE TOOLS**

No. 7018 — Distributor lock-nut wrench,  $\frac{1}{2}$  double hex for Chrysler Corp., Cadillac, Ford and Mercury.

No. 7019 — Distributor lock-nut wrench, %6" double hex for Buick, Pontiac, Oldsmobile, Chevrolet and AMC autos.

No. 7056 — Distributor lock-nut wrench, 13mm double hex for '72 thru current Capri with 2.8 litre V-6 and '74 thru current Mustang II.

No. 817 — ENGINE CAMSHAFT BEARING REMOVING AND INSTALLING SET . . . Services a wide range of auto, truck and tractor camshaft bearings! Handles bearings of 1.125" to 2.750" I.D. Complete instructions.







## **ENGINE SERVICE TOOLS**



No. 7059 — VACUUM PUMP . . . Used in checking, measuring and adjusting varied vacuum operated components. The 7059 creates and holds a metered vacuum for pumping, draining, testing and evacuating air, liquids and gases. Has a pumping rate of one cu. in./stroke and attains a

vacuum of up to 25 inches of mercury in a

few seconds.



No. A-202-A — PULLEY AND DRIVE END BEARING PULLER... To remove pulley from Chrysler and Ford alternators and power steering pumps. Unique four-jaw design allows puller to remove the double-groove Chrysler pulley ... normally a difficult job. Also removes drive-end bearing from Ford and Chrysler alternators.



7012

825

No. 7005 — POWER STEERING PUMP PULLEY REPLACER... Required to properly replace the pulley on Ford slipper-type power steering pumps. Force cannot be exerted through pump shaft or damage to internal parts may occur. Roller bearing in tool allows easy turning effort and tool shape prevents damage to pump.

No. 825 — HYDRAULIC VALVE LIFTER PULLER . . . Specially designed to go through the push rod holes and expand inside the lifter to pull lifter out of bore.

No. 7012 — VALVE ADJUSTING LOCK SCREW NUT WRENCH FOR PINTO . . . Provides access to the center valves without removing the oil supply tube on 2 litre OHC Pinto engines. Permits use of torque wrench.



## **ENGINE SERVICE TOOLS**

No. 7020-H — HEAD MOUNT-ING FIXTURE . . . Adds versatility to the No. 7020 Bench Hold-

ing Fixture, page 25. Permits sturdy mounting of cylinder heads for valve spring removal, valve guide and seat work, various

drilling jobs.

METRIC SERRATED BOLT BITS . . . These four special metric tools make servicing of imports and some small American cars with metric fasteners less of a struggle.

No. 7015 — 8mm, for specially shaped socket head bolts retaining the oil pump on Pinto engines (2,000cc) and Opel serrated

fasteners except head bolts.

No. 7016 — 12mm, for special head bolts in the cylinder head of Ford Pinto 2 litre OHC engines and Opel 1.9 litre (1900cc) engines.

No. 7035 — 6mm, for disassembly of VW and Opel disc brake caliper halves. Designed permits use of torque wrench. On Buick Opel, bit also loosens or tightens retaining bolts on oil pump return line.

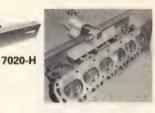
No. 7036 — 10mm, for engine cylinder head bolts on 1.1 litre Buick Opel engines.

No. 7076 — CARBURETOR LIMITER CAP REMOVER . . . Removes idle limiter caps from late model GM (thru 1974), Ford, Chrysler and AMC vehicles without damaging the carburetor adjusting screw. Using makeshift tools not designed for the job can damage the screw,

necessitating replacement, but the mechanical screw power of the 7076 does the job quickly and easily without damage.

No. 7078 SPARK PLUG BOOT PULLER . . . Removes even baked on plug wire boots easily. Pulling force is exerted on the boot, not the wire, eliminating the problem of separating the wire from the boot.

7078











#### **ELECTRONIC DIAGNOSTIC EQUIPMENT**

#### NO. 7200 CHARGING SYSTEM ANALYZER

Detect faulty system components quickly.



Diagnose suspected charging system problems quickly and easily with this pocket sized analyzer. It's designed for use on any vehicle with a 12 volt, positive or negative grounded alternator charging system. In seconds you can find out if the battery and regulator are working properly and single

out an open or shorted rectifier, rotor field, stator or diode trio. Solid state design provides instant readout, no meters or scopes to decipher. Simple to use: Just attach the clip-on connectors to the alternator and start the engine.

## ELECTRONIC IGNITION ANALYZER NO. 7220-K

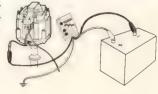
 Quickly check performance of battery, module, magnetic pickup and coil primary circuit.



7220-K

Designed to detect problems in Ford, GM and Chrysler cars with electronic ignitions and all 1978 AMC automobiles. Instant readout shows battery, module, magnetic pickup or coil primary circuit problems. A special calibrated spark plug for pretesting the system indicates if the ignition is providing the proper out-

put. Compact carrying case and detailed instructions.





#### **ELECTRONIC DIAGNOSTIC EQUIPMENT**

 Two easy-to-use diagnostic units for all GM vehicles using the under-hood master diagnostic connector





# SIMPLE CONNECTION PROCEDURE ... Just plug the analyzer into the under-hood master diagnostic connector and the light display reveals the problem.



Detection of electrical faults in the starting/charging system and air conditioning electrical system of GM vehicles is easier than ever with these two analyzers. Just plug the analyzer into the master connector and the light display reveals the problem. Each analyzer is capable of detecting up to 10 problems. Extra-long leads permit one-man, in-car trouble-shooting.

\*Not for use on vehicles with automatic temp, control

systems

No. 7201 — Starting/Charging System Analyzer.

No. 7202-A — Air Conditioning Electrical System Analyzer.



7082

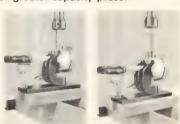
## **ENGINE SERVICE TOOLS**

#### NO. 7082 PISTON PIN REMOVER/INSTALLER SET

Unique design services wide range of piston/pin assemblies.

All the tooling and adapters needed for piston pin work are included in one handy carrying case. Services piston/pin assemblies quickly and easily without damaging any components. The unique design of the anvil support eliminates any pressing force on the piston — that floats free — preventing damage to the assembly. Service a wide range of piston pin assemblies with this one package and a 10 ton or greater capacity press.







Simulates cold-start conditions in minutes.

## CHOKE NO. 7032-K

No longer must you wait hours for engine cool down to tackle a choke adjustment job. The Choke Checker chills the bi-metal spring in just minutes to close the choke butterfly, simulating troublesome, cold-

start conditions. There's no guesswork... profit robbing customer comebacks are a thing of the past. Can also be used to apply hot or cold air to the in-car sensor of automatic temperature control systems. The Choke Checker operates with a normal shop air supply.





## REAR SUSPENSION AND DRIVE LINE TOOLS

No. 7025-A — UNIVERSAL JOINT REMOVING/INSTALLING TOOL . . . Removal and replacement of universal

joints on most car makes and models can be accomplished without resorting to makeshift, "brute-force" methods that are unsafe and can damage costly components. Removes and replaces universal joints with needle-type bearings (including new GM CVtype, plastic-pin type U-ioints).

No. 827-B - UNIVERSAL HUB PULLER . . . Has readily adjustable sliding arms to pull wheel hubs quickly and easily. Maximum reach is 71/2" bolt circle. Provides a straight pull, will not distort wheel lugs. Five legs should be used on Cadillacs and Jeep hubs.

Striking wrench and puller screw included.

No. 967-C - SLIDE HAMMER REAR AXLE PULLER . . . Large size fits most passenger cars and light trucks. Services axles with bolts or stude up to %6" dia. Fits 4, 5 or 6-bolt stud circle to 5%6". It comes complete with the pulling plate and the 5-pound slide hammer.

**DIFFERENTIAL BEARING PULLERS . . . For** removing differential side carrier bearings of a wide variety of cars and light trucks. Use with step plate adapters on page 8.

No. 1001-C - Puller with 31/2" max. reach, 11/4" to 41/2" spread. Primarily for servicing Ford products.

No. 1001-D - Puller with 31/4" max. reach, 6" max, spread. For servicing most GM, AMC and Chrysler products.

1001-D





#### UNIVERSAL CLUTCH ALIGNING SET . . .

Aligns single disc clutches of many popular makes of cars, trucks and tractors. Set includes seven accurately machined pilots, which together with the body of the tool, accommodate pilot bearings having internal bores of: .590, .612, .624, .668, .749, .786, .808 and .984 inches.

No. 7054 - Set in plastic box. No. 7054-A - Set in plastic pouch.

#### No. 7064 - METRIC CLUTCH ALIGNING SET.

... Aligns clutch disc on a variety of imported cars including VW. Toyota, Datsun, Fiat, Opel,

Volvo and Mercedes. The set includes two adapters which, with the body of the tool, allow you to accommodate pilot bearings with internal bores of 12mm, 15mm, 15.8mm and 17mm.

#### TRANSMISSION EXTENSION HOUSING BUSHING AND OIL SEAL PULLER SETS



INSTALLING BUSHING



SEAL

... For removing and installing transmission bushing and oil seal in exact position without disassembly of transmission.



No. 400-A — For 11/2" I.D. bushings. Fits the following: '67 thru current Fords with C-4 trans, and '68 thru current Fords with FMX trans.; Chrysler 904-series Torqueflight and AMC 904-series Torque-Command trans.; GM cars with Powerglide and 300 and 350-series Turbo Hydra-Matic transmissions.

No. 401-A — For 111/16" I.D. bushings. Fits the following: '67 thru current Ford C-6 and FX trans.; Chrysler 727-series Torqueflite and AMC 727-series Torque Command trans.; GM 375 and 400-series Turbo Hydra-Matic trans.

No. 402 — For 13/8" I.D. bushings. Fits the following: Fairlane and Mustang with 6 cyl. engines; '60 thru '66 Falcon and Comet. Can also be used on many standard transmissions.

No. 7024 — AUTOMATIC TRANSMISSION CLUTCH SPRING COMPRESSOR . . . For removing and installing the transmission rear clutch piston snap ring. Adjustable, for most American cars, light trucks.



## CLUTCH & TRANSMISSION TOOLS

#### AUTOMATIC TRANSMISSION LIP SEAL PROTECTOR KIT . . .

OTC has developed two Automatic Transmission Lip Seal Protector Kits essential for clutch piston installation. Each virtually eliminates any chance of cutting lip

seals while installing the clutch piston

into the clutch housing.

No. 7038 - For assembling forward, direct and intermediate clutch pistons of GM 400 series Turbo Hydra-Matic transmissions on '66 thru current GM passenger cars.

No. 7039 - For assembling Ford and Mercury FMX automatic transmission reverse clutch pistons, '68 - current.

No. 7020 — BENCH-MOUNTED HOLDING FIXTURE . . . Holds and positions small engines, transmissions, rear axle differentials and other components up to 250 lbs., leaving both hands free for work! May be rotated 360° with positive stops at 90° increments.

No. 614 — "GROOVE GRIP" SNAP RING PLIER . . . For quick, easy removal of external snap rings which locate bearings or gears on shafts.

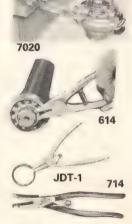
Max. spread: 1%6". 8" long.

No. JDT-1 — SNAP RING PLIER . . . Removes external snap rings used to locate bearings on shafts of transmissions, differentials, etc. Maximum spread: 17/16", 73/4" long.

No. 714 — HORSESHOE LOCK RING PLIER . . . This ruggedly-built OTC plier is designed to spread and remove horseshoe lock rings used on hydraulic brakes, differentials and transmissions. 8" long, maximum spread of 13/8".







Fed. Spec.: GGG-P-00480F



## RETAINING RING PLIERS & SEALANT DISPENSER

For both internal, external rings.

OTC offers a wide selection of retaining ring pliers.

No. 7053-K - RETAINING RING PLIER KIT . . . With one external, one internal retaining ring plier with four sizes of interchangeable tips. Four 90° tips (.035" dia.), four 45° tips (.045" dia.) and eight straight tips in .045" and .060" dia.



7053-K

#### OTHER RETAINING RING PLIERS

Ring Series	Ring Size No.	Bore or Shaft Dia. Range	Plier No.
0	25-87	1/4"-7/8"	1120 or 0200
	25-200	1/4"-2"	7053-K
5100	93-143	15/16"-17/16"	1340 or 0400
5101	150-350	11/2"-31/2"	0600
5102	354-650	335/64"-61/2"	
	50-100	1/2"-1"	1120 or 0200
0	50-200	1/2"-2"	7053-K
	106-200	11/16"-2"	1340 or 0400
	215-334	21/8"-311/32"	0600
5108	350-400	31/2"-4"	S-6800

Ring Series	Ring Size	Bore or Shaft Dia. Range	Plier No.
0	37-102	3/8"-1"	1120 or 0100
6	37-200	3/8"-2"	7053-K
N5000	106-175	11/16"-13/4"	1340 or 0300
N5001	181-300	113/16"-3"	0500
N5002	306-625	31/16"-61/4"	S-6700
	75-137	3/4"-13/8"	1120 or 0100
	75-200	3/4"-2"	7053-K
	143-200	17/16"-2"	1340 or 0300
	206-300	21/16"-3"	0500
5008	315-400	35/32"-4"	S-6700

Internal Convertible External No. S-6700 Nos. 1120 Nos. 0200 Nos. No. 1340 0400 S-6800 0100 0600 0300 0500

To select the proper plier if the ring number is known, locate the number in the chart and refer to the plier number column. Or, measure shaft or bore diameter and locate size in chart: then refer to plier number column.

#### SEALANT DISPENSER NO. 7055

When used in conjunction compound, dispenser deliv-

U.S. Pat. Nos. 3,871,553 and 238,243, Canadian Pats, issued.

with an "instant" gasket ers a seal that is simple and sure. Comes complete with 6-foot, 1/4" nylon hose for easy hook-up to your existing shop air supply. Reguires only 25 psi air pressure.



#### **DUAL SCALE TORQUE WRENCH**

• Has American Standard and Metric settings!

Automatically limits torque to the figure pre-set by the user with micrometer-type selector. A "click" is heard and felt when the desired torque is reached, and the handle moves freely for a few de-

Torque-limiting feature reduces human error!

Fed. Spec.: GGG-W-686C Type III

Class 1 (Plain-Head Models); Class II (Ratchet-Head Models)

OTC No.	Torque Range	Graduations	Square Dr. Size	Head Type	Overall Length
T-1B	30-200 ln. Lbs. 40.3-236.2 Cm./Kg.	1 In. Lb. 1.2 Cm./Kg.	1/4"	Ratchet	91/2"
T-2B	150-1000 ln. Lbs. 201.6-1180.8 Cm./Kg.	5 In. Lb. 5.8 Cm./Kg.	3/8"	Ratchet	143/4"
T-3B	15-100 Ft. Lbs. 2.42-14.17 M./Kg.	½ Ft. Lb. .07 M./Kg.	3/g"	Ratchet	143/4"
T-150	10-150 Ft. Lbs. 2.1-21.5 M./Kg.	1 Ft. Lb. .14 M./Kg.	1/2"	Ratchet	19"
T-4B	30-250 Ft. Lbs. 4.8-35.3 M./Kg.	1 Ft. Lb. .14 M./Kg.	1/2"	Ratchet	201/2"
T-5A	30-250 Ft. Lbs. 4.8-35.3 M./Kg.	1 Ft. Lb. .14 M./Kg.	1/2"	Plain	20"
T-6B	100-600 Ft. Lbs. 15.6-84.7 M./Kg.	2½ Ft. Lb. .4 M./Kg.	3/4"	Ratchet	391/2"
T-7	400-2000 Ft. Lbs.	5 Ft. Lb.	1"	Plain	105"

#### METRIC HEX KEY WRENCHES

OTC	Size	OTC	Size	OTC	Size
No.	(mm)	No.	(mm)	No.	(mm)
MW-1 MW-2 MW-3	1.27 1.5 2	MW-4 MW-5 MW-6	2.5 3 4	MW-7 MW-8 MW-9 MW-10	5 6 8

No. MW-10-K — Metric hex key wrench set with case.

#### **ALLEN TYPE SET SCREW WRENCHES**

OTC No.	Size	Fits Set Screws	Fits HH Cap Screws	OTC No.	Size	Fits Set Screws	Fits HH Cap Screws
W-1	1/16"	6	_	W-10	5/16"	5/8"	3/8" 8t 7/16"
W-2	564"	8	_	W-12	3/8"	5/8" 3/4"	1/2"
W-3	3/32"	10 & 12		W13-A	7/16"	_	
W-4	1/8"	1/4"	8	W-16	1/2"	7/8"	5/2"
W-5	5/32"	5/16"	10	W-18	9/16"	1" & 11/8"	5/8" 3/4"
W-6	346"	3/8"	1/4"	W-20		11/4" & 13/4"	1"
W-7	7/32"	7/16"	5/16"	W-24	3/4"	11/2"	11/8" 81 11/4"
W-8	1/4"	1/2"	1/4" 5/16" 3/8"	W-32	1"	13/4" & 2"	11/2"

No. W-14L Plastic kit containing W-1 thru W-8, W-10 and W-12 wrenches.



grees. Wrench op-

erates in both





7014

**MISCELLANEOUS TOOLS** 

No. 897-A — UNIVERSAL OUTSIDE THREAD CHASER . . . A fast, sure way to restore damaged threads on shafts, housings, etc. Interchangeable dies cover a large range of popular thread sizes. Capacity: from 1½" to 5" O.D. Complete with 6 dies: threads per inch — 4, 5, 5, 7, 7½, 8, 9, 10, 11, 11½, 12, 14, 16, 18, 20 and 24

No. 202817 — Metric thread chaser die set for 897-A. 3 dies included: 1mm-1.25mm-1.5mm-1.75mm; 2mm-2.5mm-3mm-3.5mm and 4mm pitch dies.

FLARE NUT WRENCHES . . . Milled slots permit wrenches to be slipped over tubing used on fuel, oil and vacuum lines.

1	OTC No.	Openings	Slot Size	Length
	CS-1214	3/8" × 7/16"	3/16" × 1/4"	51/2"
	CS-1618	1/2" × 9/16"	5/16" × 3/6"	63/4"
	CS-2022	5/8" × 11/16"	7/16" × 1/2"	73/4"

RATCHETING CHAIN WRENCHES . . . Handle parts of most any shape.

No. 887-D — Chain wrench, capacity  $\frac{1}{2}$ " to  $4\frac{3}{4}$ " O.D.

No. 888 — Chain wrench, capacity 3'' to  $6\frac{3}{4}''$  O.D.

**HEAVY-DUTY REVERSIBLE RATCHET** . . .  $1\frac{1}{2}$ " hex opening can be used to power some OTC puller screws, as well as on other nuts. Wrench will withstand 1,350 ft. lbs. of torque.

No. P61 - Ratchet head (only).

No. P-61-6 — Adapter, 1½" hex to ¾" sq. drive. No. P-61-10 — Adapter, 1½" hex to 1" sq. drive. No. M-28 — Tubular handle, 24" long.

**No. 7006** — Remove special bolts and screws.

No. 7006 — Removes seat belt bolts, windshield wiper screws from '69 thru current Ford cars; removes door striker screws of late model GM and Ford Pinto cars.

No. 7014 — Seat back pivot bolt bit for Pinto.



## **MISCELLANEOUS TOOLS**

ROLLING HEAD PRY BARS . . . Rolling head makes a great deal of leverage possible. Long tapered body may be used as a lining-up drift.

No. PB-43 — Pry bar; %6" round, 16" long.

No. PB-45 — Pry bar; 3/4" round, 18" long.

**OTC JIMMY BARS**... Forged from chrome alloy steel and heat-treated to resist bending and breaking.

No. PB-18 — 5/8" round, 18" long.

No. PB-24 — 3/4" round, 24" long.

No. PB-30 — 1/8" round, 30" long.

No. JDH-6 — OIL SEAL AND "O" RING PICK... An extremely handy little tool! Makes removal and installation of oil seals and "O"-rings a snap.

**MAGNETIC PICK-UP TOOLS** . . . Have permanent magnetic heads for retrieving parts from otherwise inaccessible places.

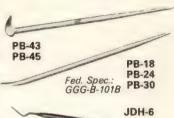
No. 831 — Pick-up tool with pocket clip. 6" long.

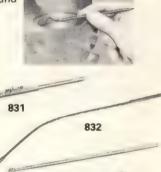
No. 832 — Flexible shaft pick-up tool. 18" long.

No. 833 — Hinged head pick-up tool. Shockproof . . . Made of durable nylon. Has pocket clip. 81/2" lg.

No. 834 — Hinged head pick-up tool. Telescopes from 17" to 27" in length.

No. HP-7 — HOLLOW PUNCH SET . . . For cutting holes in gaskets, rubber hose, washers, etc. One mandrel fits seven sizes of punches:  $\frac{1}{4}$ ",  $\frac{4}{6}$ ",  $\frac{3}{6}$ ",  $\frac{7}{6}$ ",  $\frac{7}{6}$ ",  $\frac{7}{6}$ ",  $\frac{7}{6}$ " and  $\frac{5}{6}$ ". Not for cutting metal. In plastic box.





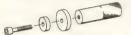




## **BUSHING DRIVER SETS**

 Interchangeable discs and handles make hundreds of size combinations possible.







1. Select the propersize components. 2. Assemble your driver tool.

No. 27793 THE "STARTER" SET

At your fingertips! The proper-size driver for most any seal, bearing or bushing installing job. Contains handle and disc sizes frequently needed in automotive service.

Contents of Set No. 27793:

Con	tents of Set No. 27	733.
10012 Cap screw	27493 —Disc, 5/8" dia.	27507 —Disc, 11/2" dia.
10020 — Cap screw	27495 —Disc, 3/4" dia.	<b>27509</b> —Disc, 15/8" dia.
10854 —Cap screw.	<b>27497</b> — Disc, 1/8" dia.	27511 —Disc, 1¾" dia.
10855 —Cap screw.	27499 — Disc, 1" dia.	27513 — Disc, 17/8" dia.
12001 —Cap screw.	27501 —Disc, 11/8" dia.	27515 —Disc, 2' dia.
14701 —Plastic box.	27503 —Disc, 11/4" dia.	W-6 —Allen Wrench
27487 —Small handle.	27505 —Disc. 13/8" dia.	



Perform the job easily!



piastic

No. 818 — Bushing driver set. Includes two mandrels, plastic box and driving collars below.

Collar No.	Bushing I.D.	Bushing O.D.	Collar No.	Bushing I.D.	Bushing O.D.	Collar No.	Bushing I.D.	Bushing O.D.
26569	%6"	5/8"	26588	13/16"	15/16"	26594	11/6"	11/4"
26572	5/8"	11/16"	26589	7/8"	1"	813	Driving	Mandrel
26584	5/8"	3/4"	26590	7/8"	15/16"		for 26569	to 26587
26585	11/16"	13/16"	26591	15/16"	11/16"	814	Driving N	Mandrel
26586	23/32"	27/32"	26592	1"	11/6"		for 26588	to 26594
26587	3/4"	7/9"	26593	11/16"	13/16"	14701	Plastic B	ОХ



818

T-818

No. T-818 — Heavy-duty bushing driver set. Includes driving mandrel, plastic box and driving collars below.

Collar No.	Bushing I.D.	Bushing O.D.	Collar No.	Bushing I.D.	Bushing O.D.	Collar No.	Description
T-806	13/1e"	17/16"	T-809	13/8"	15/8"		
T-807	11/4"	11/2"	T-810	17/16"	111/16"	815	Driving Mandrel
T-808	15/16"	19/16"	T-811	11/2"	13/4"	14701	Plastic Box



## TRUCK WHEEL BEARING LOCK NUT WRENCHES



 May be used with torque wrench for wheel bearing adjustment.



Truck axle manufacturers now strongly advise accurate torquing of wheel bearing lock-nuts to prevent premature bearing failure, assure safety. A 3/4" drive square opening per-



"arive square opening permits use of an extension and torque wrench.

Wrench No.	Opening Size
1901	23/32" (6 pt)
1920	21/4" (6 pt)
1902	23/8" (6 pt)
*1936	23/8" (6 pt)
1903	23/8" (8 pt)
1921	21/2" (6 pt)
1904	29/16" (6 pt)
1905	29/16" (8 pt)
*1928	29/16" (6 pt)
1922	25/8" (6 pt)
1923	2¾" (6 pt)

Wrench No.	Opening Size
1937	23/4" (8 pt)
1932	21/8" (6 pt)
1933	27/8" (8 pt)
1906	3" (6 pt)
1907	3" (8 pt)
1934	31/8" (6 pt)
1935	31/8" (8 pt)
1908	31/4" (6 pt)
1909	31/4" (8 pt)
1924	33/8" (8 pt)
1910	31/2" (6 pt)

Wrench No.	Opening Size
1911	31/2" (8 pt)
1925	3¾" (8 pt)
1926	33/4" (6 pt)
1927	313/16" (8 pt)
1912	3 %" (6 pt)
1913	31/8" (8 pt)
1914	4" (6 pt)
1915	41/8" (6 pt)
1916	43/8" (6 pt)
1917	43/8" (8 pt)
1918	4%" (6 pt)
1919	43/8" (8 pt)

<sup>\*</sup>Fits special rounded hex nuts found on some Dana axles.

#### **TUBULAR SPANNER WRENCHES**

Designed to remove and install wheel bearing lock-nuts of Chevrolet-built truck axles.

No. 1929 — For servicing '46 thru current Chevrolet and GMC 5,200 and 7,200 lb.

axles. Socket O.D. — 25/8".

No. 1930 — For servicing '54 thru current Chevrolet and GMC 11,000 to 13,500 lb.

axles. Socket O.D. — 21/8".

No. 1931 — For servicing '54 thru current Chevrolet and GMC 15,000 lb. axle; '66 thru current 17,000 lb. 2-speed axle and '65 thru current 15,000 lb. trailing axle. Socket O.D. — 35/8".







bearing.

voke.

## HEAVY-DUTY SERVICE TOOLS







Mechanical

power easily

removes out-



#### No. 7070 — TRUCK TRANSMISSION BEAR-ING SERVICE SET FOR FULLER TRANS-MISSIONS

This set eases the job of removing the input shaft bearing, main transmission front countershaft bearings and auxiliary section countershaft bearings

front countershaft bearings and auxiliary section countershaft bearings on Fuller models 910-913 and 915 twin countershaft truck transmissions. It can also be used to remove 1600-1800 series end yokes. Utilizing 10 tons of mechanical power, the 7070 greatly reduces the time needed to remove the four countershaft bearings and input shaft bearings.



replaceable



Expands tapered cone to speed axle disassembly on medium and heavy duty truck axles.

No. 7069 — HEAVY-DUTY TRUCK BRAKE SPRING PLIER. . . Saves time and effort removing and replacing extra-heavy brake shoe return springs. The pliers huge size, 261/4" long, gives the leverage needed to do the job and the big jaw opening allows servicing even the widest brake shoes. The tip is replaceable, ensuring long tool life.

No. 204141 — Tip kit . . . replaces standard 202621 tip when servicing "S" carn type brake return springs.

No. 7077 — AXLE STUD CONE PLIER . . . Easily removes the tapered cone from rear axle studs used on medium and heavy duty truck rear axles. This specially designed plier provides the leverage needed to expand the cone and remove it from the stud for axle removal.



## HEAVY-DUTY SERVICE TOOLS



No. 7028 — ADJUSTING WRENCH FOR SPICER-BUILT HEAVY DUTY CLUTCHES . . . Helps solve the difficult, time-consuming job of internal adjustment of Spicer angle-spring and multiple lever clutches found on nearly 50% of all heavy-duty trucks. Until now, makeshift methods were used and often resulted in damage to parts and excessive down-time.



No. 7057 — SERVICE SET FOR HEAVY-DUTY SPICER U-JOINTS . . . Removes

even the most rusted and corroded bearings easily,

mechanically, without damage to costly U-joint components, even where space is limited. The 7057 applies up to 7 tons of force to separate the yoke assemblies and remove the bearings. It's designed to service a full range of Spicer universal joints — 1600 thru 1880 series.

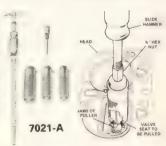




/05/

U-joint disassembly.

No. 7021-A — VALVE SEAT REMOVING SET . . . Easily removes either straight or angled type valve seats. Straight pull and 360° gripping action of the puller collet prevents damage to head, eliminating danger of flying valve seat fragments. Even the most rusted valve seats can be removed with a few sharp blows with the slide hammer. The set is complete with the slide hammer assembly.





## HEAVY DUTY SERVICE TOOLS



Turnbuckle-like action spreads the housing for removal of the ring gear clus-





A real must for any shop offering differential service.

No. 7071 — DIFFERENTIAL HOUSING SPREADER... Helps you solve the difficult, time-consuming job of removing and/or installing the differential and ring gear assembly from the carrier on Dana models 30 through 70 heavy-duty axles. This heavy-duty tool utilizes mechanical screw power to spread the housing, permitting easy removal of the differential assembly without makeshift methods that can damage costly components.





No. 7079 — DIAL INDICATOR SET... A universal dial indicator set that utilizes a 12" flexible arm to get at those hard-to-reach places. It is ideal for such jobs as locating driveline vibrations, setting up a ring gear and pinion and checking suspension loose-

ness. A strong ON-OFF magnetic base holds tight to almost any clean metal surface. The 11/2" dia. easy-to-read dial face is included.

No. 7062 — HEAVY/DUTY FILTER WRENCH . . . Is designed to remove or install oil, fuel or coolant type spin-on filters up to 6 in in dia its universal design



R WRENCH . . . Is designed to remove or install oil, fuel or coolant type spin-on filters up to 6 in. in dia. Its universal design permits use on automobiles, tractors and heavy trucks. The rugged nylon strap holds so well that it grips tighter as leverage is increased. A special swivel handle and 3/4" square drive clears obstructions around the filter.



## HEAVY-DUTY SERVICE TOOLS



No. 7081 — TRUCK BRAKE ANCHOR PIN PRESS... With this rugged C-frame press you can remove the often rusted, hard-to-remove truck brake anchor pins easily. Mechanical screw power of the 7081 does the job quickly and with little effort. Makeshift methods that all too often damage costly brake spiders are eliminated. With this press you can take on truck brake pins up to 1½" in diameter.

No. Y-399-A — King Pin and Anchor Pin Pusher (not pictured) . . . Delivers up to 30 tons of hydraulic force to remove even "frozen" king pins easily. Four special collars and

two pins accommodate king pins of 1/6" to 2" in diameter and up to 111/4" long. A special adapter is included for removing anchor pins. For complete information on this truly heavy-duty service tool, refer to page 58 of the OTC A-77 Automotive Catalog.

ADJUSTABLE HOOK SPANNER WRENCHES . . . Replaces many fixed-size wrenches! Jaws adjust to eleven positions for capacity of 43/4" to 123/4" O.D. 1" dia. handle; overall length: 24".

No. CT-684 —Wrench with 3/8" thick jaw.

No. CT-685 — Wrench with two interchangeable jaws: 3/8" and 3/4" thick.

No. 885 — ADJUSTABLE SPANNER WRENCH . . . For turret adjusting nuts or packing gland nuts. 11/2" to 4" cap. Handle: 19" lg.

No. Z-914 — SPECIAL ADJUST-ABLE SPANNER . . . Ideal for adjusting pillow block bearings. Adjustable from ½" to 2¾". 9¼" Ig.



Military Spec.: MIL-P-80128

PUMP MODEL NO.

Air/Hvd. Y-125-B Hand

Electric Y-330-CV

Electric Y-1000-AV

table and equipment

Y-110

Y-110-A

Y-106-BA

Y-109-CA

Y-330-CA

Y-150-A

V-1506-CA Flectric Y-1506-CV

Y-1000-A

Y-125-A

None

Hand

Hand

Hand

Hand

Hand



## HYDRAULIC SHOP PRESSES

A press for every need!

CAPACITY

171/2-TON

10-TON

25-TON

30-TON

CAPACITIES:

10, 12, 171/2, 25, 30, 50, & 100-TON

OTC offers a wide selection of shop forcing presses. Conventional H-frame and "Open-throat" models are available. Each is built to give years of dependable service.

PRESS

FRAME

Open-throat Hand

H-Frame

H-Frame

H-Frame

Open-throat



H-Frame 50-TON Open-throat Hand 100-TON H-Frame permit side-loading

> Several shop accessories and accessory sets are available and described in detail in OTC's Automotive Catalog, A-77. Pictured, left, is the Y-30-PA Press Accessory Set for 25-ton presses. Enables your shop to do a multitude of pressing, bending jobs.

#### of bulky work. SHOP PRESS **ACCESSORIES**

models



#### FOR MORE INFORMATION . . .

Please consult Automotive Catalog A-77 for full information on OTC's shop forcing presses and accessories. You'll also find a wide variety of hydraulic pumps listed in the A-77 Catalog.



## SHOP PRESS ACCESSORIES

7027

#### No. 7027 — REAR AXLE BEAR-ING PULLER/INSTALLER SET . . .

Save time and money using the tools in this universal set with at least a 25-ton capacity shop press. Use the set to remove or install flange-type rear axle bearings from Ford, GM, Chrysler, AMC and some foreign cars . . . plus light trucks. The special pulling collets in the set precisely fit the various bearing diameters, providing a safe, positive pull from the axle shaft, removing even the toughest bearing quickly and easily. If the bearings are broken, removing the inner race is no problem since special adapters are included in the set.







Removing

Installing

## No. Y-2100-B — DRUM AND ROTOR STUD FIXTURE . . . Handles stud removal and in-

Handles stud removal and installation when used with at least a 17½-ton press. Studs are easily pressed out of the drum-hub or rotor, new studs are inserted and peened securely. All punches and anvils are supplied with the set. Both fixture frame and tooling feature heavy alloy steel construction.





Photos above show stud removal and staking operation with the Y-2100-B.

Military Spec.: MIL-C4551-E



## **MOBILE FLOOR CRANES**

Rugged tubular construction for lasting service.



CAPACITIES: 1,000 — 2,000 — 4,000 LBS.

Handle any lifting job with speed and ease! Models 1809 and 1810 fold into compact units, have 2-speed hydraulic hand pump.
Model 1807's "auto-lock" speeds setting the boom work height.
No. 1807 — 1,000 lb. cap. fixed-leg crane with hydraulic lifting jack, grab hook. Wt., 197 lbs.
No. 1809 — 2,000 lb. cap. with "Fold-Away" feature and adjustable leg spread. Has 62" lifting chain. Shipping Wt., 471 lbs.
No. 1810 — Same as 1809, but has 4,000 lb. cap. Shipping Wt., 642 lbs.

See A-77 Catalog for complete information. U.S., Pat. No. 3,367,512 Pat. 1969 in Canada

#### LOAD POSITIONING SLINGS



## LOAD-ROTOR®

Here's the accessory that makes your crane or hoist more versatile! Greatly reduces job time and effort. Self-locking worm-and-gear set permits rapid adjustment of the angle of the com-



ponent being handled.

No. 1805 — 2,000 lb.
cap., ¼" high-test 52"
chain and mounting
brackets. Wt. 9 lbs.

No. 1806 — 4,000 lb.

cap. Same as above except has 5/6" high-test, 60" chain. Wt. 23 lbs.

# MIT:

#### LIFTING EQUIPMENT

1803

U. S. Patent No. 3,848,749 Canadian Pats. Issued

#### No. 1803 — LEVEL LIFT FLOOR CRANE . . .

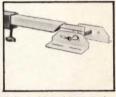
Permits easy engine removal through the grill shell opening on vans, recreational vehicles and motor homes. A special feature in

the end of the boom holds the load level in any position and a swivel bracket permits convenient pump positioning. The extended boom adapter is ideal for servicing vehicles

with cab-over-engine design. For conven-

tional lifting, a hook attachment is included with the 750 lb. capacity crane. The crane is equipped with swivel casters for easy positioning during engine removal or installation.





Adjustable plate on the boom extension bolts to carburetor base of the intake manifold.

#### No. 1785 — High-Lift TRANSMISSION JACK . . .

Permits easy transmission replacement with 1785

vehicle on a hoist. A 2-stage hydraulic cylinder, with integral pump, provides a reach from 36" to 76": A foot operated metered release provides precise control of load descent. The universal transmission adapter included can tilt in any direction for proper alignment of the transmission to the engine.





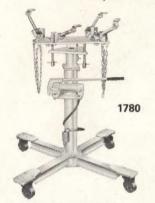
Wide stance provides great stability.

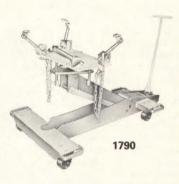
Military Spec .: MIL-L-45047-0



## TRANSMISSION JACKS

- Rugged construction provides 2,000 lb. capacity.
- Universal "AdjustaGrip" mounting arms . . . special adapters not needed.





"AdjustaGrip" arms easily fasten to any component . eliminate the need for special adapters.



Engine and transmission assembly being removed from vehicle.

Designed to permit one-man transmission removal and replacement . . . ideal for handling other assemblies too! Wide-spaced ball-bearing swivel casters provide exceptional stability. Safety flow control valve slows descent of boom under heavy load. Three-point screw adjustment allows precise tilting of saddle.

No. 1780 — High-lift transmission jack. Lifting range: 413/4" to 723/8". Includes four mounting arms, two 48" attachment chains. Shipping Wt., 252 lbs.

No. 1790 — Lo-lift transmission jack. Lifting range: 10" to 36". Includes four mounting arms, two 48" attachment chains. Shipping Wt., 292 lbs.





## **REPAIR STANDS**

 Rotate engine a full 360°, locks securely in position.

Universal design for many applications.

No. 1725 — UNIVERSAL ENGINE STAND . . . 1,000 lb. cap. Easy engine mounting. Pin holds work in up to 8 positions. Provides solid work base when

lowered onto front support. Handle

turns work easily.

No. 1730-B—REPAIR STAND ... 2,000 lb. cap., twin-post design. "Adjusta-Grip" arms for mounting engines, transmissions, torque converters, rear axles, etc. Gearbox for easy turning, secure looking.





One-bolt disassembly for easy transportation

Mount engine, torque converters, transmissions, rear axles and more.

## No. 1770-A — DUAL WHEEL DOLLY

Allows one man to remove, transport and replace heavy truck dual wheel and tire assemblies. Handles wheels weighing up to 1500 lbs., any tire diameter. Hydraulic jack mechanism provides 5" lift and provides finger-tip control when positioning or lowering lifting arms. A 6' safety chain is provided to hold wheel assembly in place. Easy rolling swivel casters provide effortless maneuverability. Adjusting screw on rear caster permits tilting the unit 2°.



Unit can tilt wheel 2° for aligning wheel to axle.

#### **PULLER SETS**

- Include a wide variety of versatile attachments.
  - Handle parts removal and installation jobs on many makes and models of automobiles and light trucks.

Have the right puller when you need it with an OTC puller set. Sets include both mechanical and hydraulic models. Feature a wide variety of pullers, attachments, adapters and accessories required to remove gears, bearings, shafts, pinions, bearing outer races and



many other tightly fitted parts. Automotive sets are suitable for use on all makes and models of automobiles and light trucks. Will not become obsolete with model changes. General service sets available for other maintenance applications. With OTC puller sets, damage to parts is eliminated, and at a substantial saving in time and effort.

## FOR THE COMPLETE STORY . . . see OTC's new Automotive Catalog A-77!

This "Mini-Catalog" highlights OTC's wide selection of pulling tools, front-end tools, brake tools, engine tools, presses and floor cranes. The tools in this special catalog are fully described in the master automotive catalog, No. A-77. If you do not already have your copy contact your local jobber for your free copy.



DIVISION OF OWATONNA TOOL COMPANY Owatonna, Minnesota 55060, U.S.A.

- DISTRIBUTED BY